PATENT COOPERATION TREATY

PCT

REC'D 0 2 FEB 2006

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2004.831 WO		FOR FURTHER	ACTION	See Form PCT/IPEA/416				
1	ational application No. EP2005/050833	International filing da 28.02.2005	te (day/month/year)	Priority date (day/month/year) 05.03.2004				
International Patent Classification (IPC) or national classification and IPC A61K31/4245, C07D413/04, C07D413/14, A61P29/00, C07D403/04, A61K31/454, A61K31/4196, C07D417/04, C07D498/06, A61K31/5383, C07D417/14, A61K31/427, A61K31/422, C07D513/04, A61K31/425, A61K31/42, C07D409/04, A61K31/404								
Applicant AKZO NOBEL N.V. et al.								
	 This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 							
2.	This REPORT consists o	f a total of 6 sheets, including	this cover sheet.					
3.	This report is also accom	panied by ANNEXES, compri	sing:					
	a. \Box sent to the applica	ant and to the International Bu	reau) a total of sheets,	as follows:				
	sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).							
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.							
	seguence listing a	ational Bureau only) a total of nd/or tables related thereto, in equence Listing (see Section	computer readable form	er of electronic carrier(s)) , containing a n only, as indicated in the Supplemental Instructions).				
4.	This report contains indic	ations relating to the following	ı items:					
	⊠ Box No. I Basis o	f the opinion						
	☐ Box No. II Priority							
	☑ Box No. III Non-es	tablishment of opinion with re	gard to novelty, inventive	step and industrial applicability				
	☐ Box No. IV Lack of	unity of invention						
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement							
١ .		documents cited						
1		defects in the international a	•					
L	☐ Box No. VIII Certain observations on the international application							
Date of submission of the demand			Date of completion of th	nis report				
08.08	3.2005		31.01.2006					
Name and mailing address of the international preliminary examining authority:			Authorized Officer	"Anthoches Palantam, . E.				
European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465			Seymour, L Telephone No. +49 89 2	2399-				
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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2005/050833

_	Box No. I	Basis of the report					
1.	With regard filed, unles	With regard to the language , this report is based on the international application in the language in which it wa filed, unless otherwise indicated under this item.					
	which □ inte □ pub	eport is based on translations from the original language into the following language, is the language of a translation furnished for the purposes of: ernational search (under Rules 12.3 and 23.1(b)) elication of the international application (under Rule 12.4) ernational preliminary examination (under Rules 55.2 and/or 55.3)					
2.	With regard to the elements * of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):						
	Description	, Pages					
	1-56	as originally filed					
	Claims, Nur	nbers					
	1-10	as originally filed					
	□ a sequ	ence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing					
3.	☐ the ☐ the ☐ the ☐ the	nendments have resulted in the cancellation of: description, pages claims, Nos. drawings, sheets/figs sequence listing (specify): table(s) related to sequence listing (specify):					
4.	Supplement the calculation that calculation the calculation that calculation the calculation that calculation the calculation that calculation that calculation the calculation that calcu	port has been established as if (some of) the amendments annexed to this report and listed below on made, since they have been considered to go beyond the disclosure as filed, as indicated in the tal Box (Rule 70.2(c)). description, pages claims, Nos. drawings, sheets/figs sequence listing (specify): table(s) related to sequence listing (specify):					
	* If ite	em 4 applies, some or all of these sheets may be marked "superceded "					

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2005/050833

		x No. III Non-establishment o Dicability	of op	inion with regard to novelty, inventive step and industrial		
1.	The obv	ne questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-vious), or to be industrially applicable have not been examined in respect of:				
		the entire international application,				
	\boxtimes	claims Nos. 10 with respect to industrail applicability				
		because:				
	☒	the said international application, or the said claims Nos. as above relate to the following subject matter which does not require an international preliminary examination (specify):				
		see separate sheet				
		the description, claims or drawings (indicate particular elements below) or said claims Nos. are so unclear that no meaningful opinion could be formed (specify):				
		the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.				
		no international search report has been established for the said claims Nos.				
		the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:				
		the written form		has not been furnished		
				does not comply with the standard		
		the computer readable form		has not been furnished		
				does not comply with the standard		
		the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.				
		See separate sheet for further	detai	ls		

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2005/050833

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-10

No: Claims

Inventive step (IS)

Yes: Claims

1-10

No: Claims

Industrial applicability (IA)

Yes: Claims

1-9

No: Claims

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item III

c

Claim 10 relates to subject-matter considered by this Authority to be covered by the provisions of Rule 67.1(iv) PCT. Consequently, no opinion will be formulated with respect to the industrial applicability of the subject-matter of this claim (Article 34(4)(a)(I) PCT).

Re Item V

1. Reference is made to the following documents:

D1: WO-A-02 36590 D2: WO-A-04 00832

2. The subject-matter of the present claims is new (Article 33(2) PCT):

The cannabinoid agonists of D1 differ from the present compounds in the substituent at position 1 of the indole ring (cf. definition of present R_1 with definition of Het and Z in R_5 of D1) and in the nature of substitution at the oxadiazole ring (see D1, definition of R_1).

The cannabinoid agonists of D2 differ from the present compounds in the definition of the substituent at position 3 of the indole ring.

3. Inventive step (Article 33(3) PCT)

The problem underlying the present application lies in the provision of further cannabinoid agonists (see p. 2, lines 12 - 13).

The cannabinoid agonists of D1 and D2 differ substantially in structure from the present compounds (see point 2). The present activity has been substantiated for a representative number of compounds (see Table 1). An inventive step can therefore be acknowledged.

4. Industrial applicability (Article 33(4) PCT)

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

PCT/EP2005/050833

For the assessment of the present claim 10 on the question whether it is industrially applicable, no unified criteria exist in the PCT Contracting States. The patentability can also be dependent upon the formulation of the claims. The EPO, for example, does not recognize as industrially applicable the subject-matter of claims to the use of a compound in medical treatment, but may allow, however, claims to a known compound for first use in medical treatment and the use of such a compound for the manufacture of a medicament for a new medical treatment.